Application Number: 10/506,500   Page: 2
Date: 1. February 2007

Amendments to the Claims

1. (Currently amended) Method for machine-executable information processing,
    representing information in a hierarchical data structure consisting of at least two
    hierarchy levels, where<u>in</u>
    the structural configuration can be modeled by input means<u>, in particular, by enabling
    the insertion of new hierarchy levels and the addition of new elements within existing
    hierarchy levels,
    the hierarchy levels are capable of containing elements, each of which is at least able
    to contain contents, which consist either
    a) in an elementary structure, whose configuration is not modelable for the purpose of
    this method; or
    b) in an aggregate structure, which constitutes a hierarchy level subordinate to the
    corresponding element,
    a sub-hierarchy can be added subordinate to an existing hierarchy level,</u> and
    the contents of an element can either
    a) be manipulated by input means; or
    b) be determined by machine-evaluating an expression, which can be manipulated by
    input means, said expression being able to contain a reference <u>using dynamic binding to
    refer</u> to at least one other element.

2. (Canceled)

3. (Currently amended) Method according to ~~any one of claims 1 or 2~~ <u>claim 1</u>, wherein
    modeling is carried out in an object-oriented way, ~~particularly involving classes~~ <u>by having
    a class structure represent the configuration and properties of a number of aggregate
    structures of the same kind separately from their individual contents</u>.

4. (Currently amended) Method according to ~~any one of claims 1 to 3~~ <u>claim 1</u>, wherein
    parameters for the elements' representation and editing modes are manipulatable by
    input means.

5. (Original) Method according to claim 4, wherein multiple sets of parameters may exist per
    element with one of said parameters sets becoming effectual depending on the results of
    manipulatable expressions.

6. (Currently amended) Method according to ~~any one of claims 1 to 5~~ <u>claim 1</u>, wherein all
    information, including meta information, is stored persistently, particularly in an object-
    oriented or relational database.

7. (Currently amended) Method according to ~~any one of claims 1 to 6~~ claim 1, wherein the expression evaluation is carried out in an optimized way by

a) marking the result of an expression invalid if, and only if the expression was modified or the contents of an element referenced by the expression were modified or became invalid and

b) updating the result on an expression not until it is needed for representation or in the course of computing another result.

8. (Currently amended) Method according to ~~any one of claims 1 to 7~~ claim 1, wherein the system architecture allows for a distribution of functions, which enables separate processing for

a) visualization and editing of information and meta information,

b) serving information and meta information, in particular for purposes of visualization and editing or for input and output directed at external systems,

c) parallel evaluation of expressions by means of any number of processors.

9. (Currently amended) Method according to ~~any one of claims 1 to 8~~ claim 1, wherein the expression evaluation can be extended with external (user-defined) functions.

10. (Currently amended) Method according to ~~any one of claims 1 to 9~~ claim 1, wherein upon request an external process is notified about changes or invalidations of selectable structure components.

11. (Currently amended) Software product containing components, which execute in conjunction with hardware a method according to any one of claims ~~1 to 10~~ 1, 3 to 10, or 13.

12. (Currently amended) System, which is configured to be capable of executing a method according to ~~any one of claims 1 to 11~~ claim 1.

13. (New) Method according to claim 1, wherein the machine-evaluable expression can return contents in the form of an aggregate structure.